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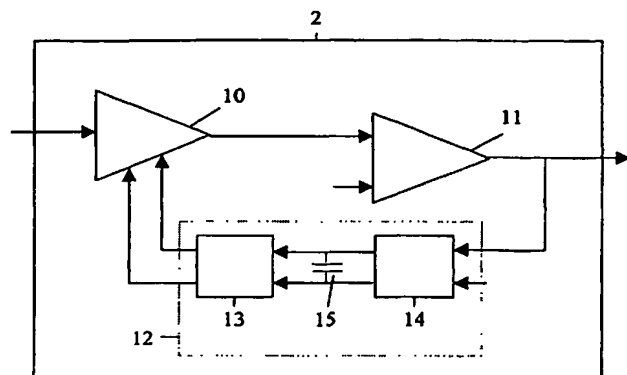
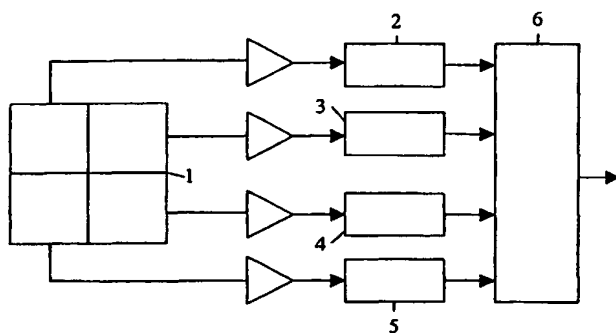
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(54) Title: OPTICAL DISK SYSTEM WITH NON-LINEARLY CONTROLLED AMPLIFIER



(57) **Abstract:** Optical disk systems comprising photo detectors (1) with variable gain amplifiers (10) and slicers (11) are provided with generators (12) in feedback paths between slicer (11) and amplifier (10) for controlling said amplifier (10) non-linearly. As a result, time constants of the control loop of said amplifier (10) which depend upon the level of the input signals are now compensated and the timing behavior of the control loop of said amplifier (10) has got a more continuous character. Said generator (12) comprises a converter (13) and is of low complexity and easy to integrate on a photo detector integrated-circuit together with said amplifier (10) and slicer (11) followed by a differential time delay detector (6). Said generator (12) comprises a further converter (14) with a capacitor (15) forming an integrator for making the mean value of the output voltage signal of said slicer (11) equal to zero.

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